UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/285,639	04/02/1999	JOSEPH L. HELLERSTEIN	YO998-467	3956

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EXAMINER
LY, ANH

ART UNIT	PAPER NUMBER
2172	

DATE MAILED: 05/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

	Application No.	Applicant(s)
Office Action Summary	09/285,639	HELLERSTEIN, JOSEPH L.
	Examiner	Art Unit
	Anh Ly	2172

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 March 2003* .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
        application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .

4)☐ Interview Summary (PTO-413) Paper No(s). _____ .
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: .

DETAILED ACTION

1.   The appellant has filed Brief on 03/04/2003, which was carefully considered in an

Appeal Conference. The conferees found appellant's argument, "based on structure

associated with the source dataset and target dataset," (page 8 of Appeal Brief) to be

persuasive. It was decided in the conference that the final Rejection in Page #12 would

be withdrawn. The Office regrets any inconvenience caused to the applicant.

2.   Claims 1-27 are pending in this application.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the
> United States before the invention thereof by the applicant for patent, or on an international application
> by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this
> title before the invention thereof by the applicant for patent.

4.   The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act

of 1999 (AIPA) and the Intellectual Property and High Technology Technical

Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting

directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior

to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5.   Claims 1-4, 12-15, 23-24 and 26 are rejected under 35 U.S.C. 103(a) as being

unpatentable over US Patent No. 6.282.318 issued to Dietrich et al. (herein Dietrich).

       With respect to claim 1, Dietrich discloses determining at least one collection of

data elements from the at least one target dataset that best matches a collection of data

elements from the source dataset based on structures associated with the source

dataset and the target dataset; and computing at least one distance metric between the

at least one target collection and the source collection such that a user can select the at

least one target collection given the at least one computed distance metric (two

datasets as in fig. 1 are collection of a data from the same structure: relational

databases or sequential data files: see abstract, col. 1, lines 58 and lines 16-26; also

col. 6, lines 21-38; finding a best match of elements of the tow datasets: col. 2, lines 7-

8, lines 14-15; and defining or computing the distance metric by using similarity

measure technique from Euclidean distance: col. 2, lines 54-57 and col. 3, lines 57-67

and col. 4, lines 1-14).

       With respect to claim 2, Dietrich discloses wherein there is a plurality of target

datasets from which respective best matching target collections are determined and

respective distance metrics are computed such that the computed distance metrics are

presented to the user in a ranked order (col. 2, lines 40-60 and col. 3, lines 4, lines 2-14).

With respect to claim 3, Dietrich discloses wherein the presenting step further includes presenting the respective target collection to the user along with the respective computed distance metric (col. 2, lines 54-57 and col. 4, lines 2-14).

With respect to claim 4, Dietrich discloses wherein the presenting step further includes presenting a respective name associated with target dataset to the user along with the respective target collection and computed distance metric (col. 3, lines 57-67 and col. 4, lines 1-14).

Claim 12 is essentially the same as claim 1 except that it is an apparatus rather than a method (two datasets as in fig. 1 are collection of a data from the same structure: relational databases or sequential data files: see abstract, col. 1, lines 58 and lines 16-26; also col. 6, lines 21-38; finding a best match of elements of the tow datasets: col. 2, lines 7-8, lines 14-15; and defining or computing the distance metric by using similarity measure technique from Euclidean distance: col. 2, lines 54-57 and col. 3, lines 57-67 and col. 4, lines 1-14), and is rejected for the same reasons as applied to the claim 1 hereinabove.

Claim 13 is essentially the same as claim 2 except that it is an apparatus rather than a method (col. 2, lines 40-60 and col. 3, lines 4, lines 2-14), and is rejected for the same reasons as applied to the claim 2 hereinabove.

Claim 14 is essentially the same as claim 3 except that it is an apparatus rather than a method (col. 2, lines 54-57 and col. 4, lines 2-14), and is rejected for the same reasons as applied to the claim 3 hereinabove.

Claim 15 is essentially the same as claim 4 except that it is an apparatus rather than a method (col. 3, lines 57-67 and col. 4, lines 1-14), and is rejected for the same reasons as applied to the claim 4 hereinabove.

Claim 23 is essentially the same as claim 1 except that it is an article of manufacture rather than a method (two datasets as in fig. 1 are collection of a data from the same structure: relational databases or sequential data files: see abstract, col. 1, lines 58 and lines 16-26; also col. 6, lines 21-38; finding a best match of elements of the tow datasets: col. 2, lines 7-8, lines 14-15; and defining or computing the distance metric by using similarity measure technique from Euclidean distance: col. 2, lines 54-57 and col. 3, lines 57-67 and col. 4, lines 1-14), and is rejected for the same reasons as applied to the claim 1 hereinabove.

With respect to claim 24, Dietrich discloses determining one or more collections of data elements from the plurality of target databases that best match a collection of data elements from the source dataset, the determination being based on the structures associated with the source dataset and the plurality of target datasets; and computing one or more distance metric between the one or more target collection and the source collection (two datasets as in fig. 1 are collection of a data from the same structure: relational databases or sequential data files: see abstract, col. 1, lines 58 and lines 16-26; also col. 6, lines 21-38; finding a best match of elements of the tow datasets: col. 2,

lines 7-8, lines 14-15; and defining or computing the distance metric by using similarity

measure technique from Euclidean distance: col. 2, lines 54-57 and col. 3, lines 57-67

and col. 4, lines 1-14).

Claim 26 is essentially the same as claim 24 except that it is an apparatus rather

than a method (two datasets as in fig. 1 are collection of a data from the same

structure: relational databases or sequential data files: see abstract, col. 1, lines 58 and

lines 16-26; also col. 6, lines 21-38; finding a best match of elements of the tow

datasets: col. 2, lines 7-8, lines 14-15; and defining or computing the distance metric by

using similarity measure technique from Euclidean distance: col. 2, lines 54-57 and col.

3, lines 57-67 and col. 4, lines 1-14), and is rejected for the same reasons as applied to

the claim 24 hereinabove.

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

7.   This application currently names joint inventors. In considering patentability of

the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)

prior art under 35 U.S.C. 103(a).

8.   Claims 5-11, 16-22, 25 and 27 are rejected under 35 U.S.C. 103(a) as being

unpatentable over US Patent No. 6,282,318 issued to Dietrich et al. (herein Dietrich) in

view of US Patent No. 5,970,490 issued to Morgenstern.

With respect to claims 5-7, Dietrich discloses a method of automating navigation

as discussed in claim 1.

As to the limitation, "the source collection of data elements is specified by a

source collection descriptor, and the at least one target collection of data elements is

specified by a target collection descriptor," Dietrich does not explicitly indicate that the

collection descriptor.

However, Morgenstern discloses clause of an SQL query (col. 18, lines 55-58);

and relational databases and attribute associated with SQL query for collection

descriptor as claimed (col. 10, lines 9-67, and col. 11, lines 1-15).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made to combine the teachings of Dietrich with the teachings

of Morgenstern so as to obtain SQL query or clauses in the relational database (col. 18, lines 51-58). This combination would provide a method for integrating data between the source and target data including providing an interoperability with specifications for transforming the data into a common intermediate representation of the data using the specifications, transforming the intermediate representation of the data into a specialized target representation using the specifications (Morgenstern - col. 2, lines 60-67, and col. 3, lines 1-34) in the automation navigation between dynamic data with dissimilar structured environment.

With respect to claim 8, Dietrich discloses a method as discussed in claim 1.

As to the limitation, "generating at least one preminary target collection descriptor associated with the at least one target collection by transforming a source collection descriptor associated with the source collection and removing constraints associated with the at least one preliminary target collection descriptor until a non-null element collection is obtain," . Dietrich does not explicitly indicate that the collection descriptor.

However, Morgenstern discloses clause of an SQL query (col. 18, lines 55-58); constraints (col. 15, lines 15-20 and col. 34, lines 44-63; also see col. 10, lines 9-67, col. 11, lines 1-15, col. 1, lines 39-60, col. 9, lines 33-43, and col. 18, lines 51-67).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Dietrich with the teachings of Morgenstern so as to obtain SQL query or clauses in the relational database (col. 18, lines 51-58). This combination would provide a method for integrating data between the source and target data including providing an interoperability with specifications for

transforming the data into a common intermediate representation of the data using the

specifications, transforming the intermediate representation of the data into a

specialized target representation using the specifications (Morgenstern - col. 2, lines 60-

67, and col. 3, lines 1-34) in the automation navigation between dynamic data with

dissimilar structured environment.

With respect to claims 9-11, Dietrich discloses a method of automating

navigation as discussed in claim 1.

As to the limitations, ""wherein attributes of the constraints are weighted in

accordance with their importance; wherein the distance metric is proportionally larger

when the source and target collection descriptors differ by an attribute of a constraint

that has a heavier weight associated therewith."

However, Morgenstern discloses the attributes of the constraints are weighted as

claimed (col. 4, lines 22-46, col. 6, lines 13-67, col. 7, lines 1-5, col. 10, lines 9-18, and

col. 15, lines 15-26) and SQL query for collection descriptor in the relational databases

and attribute of constraint that has heavier weight associated therewith as claimed (col.

1, lines 39-60, col. 9, lines 33-43, and col. 18, lines 51-67, col. 4, lines 22-46, col. 6,

lines 13-67, col. 7, lines 1-5, col. 10, lines 9-18, and col. 15, lines 15-26).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made to combine the teachings of Dietrich with the teachings

of Morgenstern so as to obtain SQL query or clauses in the relational database (col. 18,

lines 51-58). This combination would provide a method for integrating data between the

source and target data including providing an interoperability with specifications for

transforming the data into a common intermediate representation of the data using the

specifications, transforming the intermediate representation of the data into a

specialized target representation using the specifications (Morgenstern - col. 2, lines 60-

67, and col. 3, lines 1-34) in the automation navigation between dynamic data with

dissimilar structured environment.

Claims 16-18 are essentially the same as claims 5-7 except that they are

apparatuses rather than a method (col. 18, lines 55-58; and col. 10, lines 9-67, and col.

11, lines 1-15), and are rejected for the same reasons as applied to the claims 5-7

hereinabove.

Claim 19 is essentially the same as claim 8 except that it is an apparatus rather

than a method (col. 18, lines 55-58; col. 15, lines 15-20 and col. 34, lines 44-63; also

see col. 10, lines 9-67, col. 11, lines 1-15, col. 1, lines 39-60, col. 9, lines 33-43, and col.

18, lines 51-67), and is rejected for the same reasons as applied to the claim 8

hereinabove.

Claim 20 is essentially the same as claim 9 except that it is an apparatus rather

than a method (col. 1, lines 39-60, and col. 9, lines 33-43, and col. 18, lines 51-67), and

is rejected for the same reasons as applied to the claim 9 hereinabove.

Claim 21 is essentially the same as claim 10 except that it is an apparatus rather

than a method (col. 4, lines 22-46, col. 6, lines 13-67, col. 7, lines 1-5, col. 10, lines 9-

18, and col. 15, lines 15-26), and is rejected for the same reasons as applied to the

claim 10 hereinabove.

Claim 22 is essentially the same as claim 11 except that it is an apparatus rather than a method (Col. 1, lines 39-60, col. 9, lines 33-43, col. 18, lines 51-67, col. 4, lines 22-46, col. 6, lines 13-67, col. 7, lines 1-5, col. 10, lines 9-18, and col. 15, lines 15-26), and is rejected for the same reasons as applied to the claim 11 hereinabove.

With respect to claim 25, Dietrich discloses a method of automatically navigation as discussed in claim 24.

As to the limitation, "generating at least one preminary target collection descriptor associated with the at least one target collection by transforming a source collection descriptor associated with the source collection and removing constraints associated with the at least one preliminary target collection descriptor until a non-null element collection is obtain," Dietrich does not explicitly indicate that the collection descriptor.

However, Morgenstern discloses clause of an SQL query (col. 18, lines 55-58); constraints (col. 15, lines 15-20 and col. 34, lines 44-63; also see col. 10, lines 9-67, col. 11, lines 1-15, col. 1, lines 39-60, col. 9, lines 33-43, and col. 18, lines 51-67).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Dietrich with the teachings of Morgenstern so as to obtain SQL query or clauses in the relational database (col. 18, lines 51-58). This combination would provide a method for integrating data between the source and target data including providing an interoperability with specifications for transforming the data into a common intermediate representation of the data using the specifications, transforming the intermediate representation of the data into a specialized target representation using the specifications (Morgenstern - col. 2, lines 60-

67, and col. 3, lines 1-34) in the automation navigation between dynamic data with dissimilar structured environment.

Claim 27 is essentially the same as claim 25 except that it is an apparatus rather than a method (col. 18, lines 55-58; col. 10, lines 9-67, and col. 11, lines 1-15, col. 1, lines 39-60, col. 9, lines 33-43, col. 18, lines 51-67), and is rejected for the same reasons as applied to the claim 25 hereinabove.

Contact Information

9.   Any inquiry concerning this communication should be directed to Anh Ly whose

telephone number is (703) 306-4527 via E-Mail: **ANH.LY@USPTO.GOV**. The

examiner can be reached on Monday - Friday from 8:00 AM to 4:00 PM.

If attempts to reach the examiner are unsuccessful, see the examiner's

supervisor, Kim Vu, can be reached on (703) 305-4393.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to: (703) 746-7238 (after Final Communication and intended for entry)

or: (703) 746-7239 (for formal communications intended for entry)

or: (703) 746-7240 (for informal or draft communications, please

label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal

Drive, Arlington, VA, Fourth Floor (receptionist).

Inquiries of a general nature or relating to the status of this application should be

directed to the Group receptionist whose telephone number is (703) 305-3900.

AL
May 2nd, 2003

HOSAIN T. ALAM
PRIMARY EXAMINER